UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,722	11/16/2001	Dayong Chen	4015-1702	2826

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EXAMINER
WANG, TED M

ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

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	Application No.	Applicant(s)
Office Action Summary	10/002,722	CHEN ET AL.
	Examiner	Art Unit	
	Ted M. Wang	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 April 2007</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-6 and 8-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>12-21</u> is/are allowed.

6)☒ Claim(s) <u>1 and 11</u> is/are rejected.

7)☒ Claim(s) <u>2-6 and 8-10</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments, filed on 08/14/2007, with respect to the rejection(s) of

claim(s) 1-6 and 8-21 under 35 USC 103(a) have been fully considered and are

persuasive. Therefore, the rejection has been withdrawn. However, upon further

consideration, a new ground(s) of rejection is made in view of Alanara (US

6,286,122).

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the differences
> between the subject matter sought to be patented and the prior art are such
> that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in
> which the invention was made.

3.   Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sato (US 5,710,772) in view of Alanara (US 6,286,122, previously cited by

Examiner on 02/08/2005).

❑   With regard claim 1, as shown in figures 1-5, Sato discloses a method of

classifying a received data frame as being a Discontinuous Transmission

(DTX) high (Fig.1(b) for uplink – active speech period, Fig.5 steps S202, S210,

S211, and column 6 lines 53-57) or low class (Fig.1(c) for uplink –silent period,

Fig.5 steps S202 –S209, and column 6 lines 23-52), each of said classes

having a corresponding format wherein a known bit pattern is located in

different a respective position within said data frame (Fig.1(b) for uplink–active

speech period, Fig.1(c) for uplink –silent period, and column 3 lines 38-60), ·

said method comprising:

receiving said frame (Figs.1(b) –1(c) and Fig.2 element 13);

computing a first value (column 6 lines 23-25 and lines 53-57, where

the computed value is the data length of the time slot) representing a

confidence-weighted correlation between said known bit length and received

data of said frame ((Fig.1(b) for uplink – active speech period, <u>known bit length</u>

<u>is 324 bits</u>, Fig.1(c) for uplink –silent period, <u>known bit length is 68 bits</u>),

wherein the calculated value 68 bits or 324 bits representing a confidence-

weighted correlation, a silent period or active speech period.), and

classifying said frame as being a Discontinuous Transmission (DTX)

high or low class based on said first value (Fig.5 and column 6 lines 23-57,

where if the data length of time slot is found to be 68 bits; it is a silent period

and if the data length of time slot is found to be 324 bits; it is an active speech

period).

Sato discloses all of the subject matter as described in the above

paragraph except for specifically teaching computing a first value representing

a confidence-weighted correlation between said known bit pattern and data

from a first position of said frame.

However, Alanara teaches computing a first value (column 7 lines 1-5, where the computed first value is the bit error count) representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame (column 7 lines 3-6) in order to use the known bit pattern without channel coding and then specify a maximum number of bit errors to allow operation with a noisy radio channel (column 6 lines 61-64). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the method as taught by Alanara in which computing a first value representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame, into Sato's communication system for classifying a received data frame as being a DTX high or DTX low classes so as to use the known bit pattern without channel coding and then specify a maximum number of bit errors to allow operation with a noisy radio channel.

❑ With regard claim 11, Sato further discloses wherein said received data frame is processed in a first manner (Fig.5 steps S202-S208) or in a second manner (Fig.5 steps S202, S210, S211) different from said first manner, based on the classification of said frame as belonging to a first class (Fig.5 step S202 result of 68 bits of data length) or a second class (Fig.5 step S202 result of 324 bits of data length).

Allowable Subject Matter

4.   Claims 12-21 are allowed.

5.   Claims 2-6 and 8-10 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

   ❑   The following is a statement of reasons for the indication of allowable subject

       matter: the prior art fails to teach and suggest a method of classifying a

       received data frame as belonging to one of a plurality of possible classes,

       comprising determining D1, D2 and calculating the ration R steps as recited in

       claims 12 and 16 and computing a second value as recited in claim 2 and

       using DTX or CDVCC, and Euclidian as recited in claims 12 and 16,

       respectively.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ted M. Wang whose telephone number is 571-272-

3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M Wang
Examiner
Art Unit 2611

Ted M. Wang